

*

15 Feb 1996
WPNSSB

PURCHASE DESCRIPTION

AMPLIFIER

AA0SA-B

1. GENERAL. This procurement requires a linear, HF-UHF amplifier.

2. CLASSIFICATION. Type II, Class 5, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications.

3. OPERATING CHARACTERISTICS. The equipment shall be capable of providing linear signal amplification within the minimum technical requirements specified in MIL-T-28800 and below.

3.1 Frequency Characteristics.

3.1.1 Frequency range: 1.0 to 500 MHz.

3.1.2 Frequency Response: 2.0 dB at + 10 dBm

3.2 Amplification Characteristics

3.1.2 Gain: 30 dB fixed minimum.

3.1.3 Power Out: 300 mW at 1 dB gain compression.

3.1.4 Noise figure: 11 dB maximum.

3.3 Distortion Characteristics

3.3.1 Harmonic distortion: \leq -20 dBc at + 10 dBm out.

3.3.2 Spurious Products: < 50 dBc at + 10 dBm out.

3.3.3 Third Order Intercept: 40 dBm minimum.

3.4 Interface Characteristics

3.4.1 Impedance: 50 ohms nominal, input and output.

3.4.2 Connectors: BNC(f) or Type N(f), input and output.

3.4.3 SWR: Input 2.5:1, Output 3.0:1.

3.4.4 Mismatch Tolerance: 100 % signal return into the output at rated power out.

4. GENERAL REQUIREMENTS.

4.1 Power source. MIL-T-28800 nominal power source requirements are invoked. Maximum power

*

consumption: 200W.

4.2 Weight. 9.1 kg (20.0 lb) maximum.

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. Requests for approving the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.